

PATENT COOPERATION TREATY

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

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To:

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NOTIFICATION OF TRANSMITTAL OF
THE INTERNATIONAL PRELIMINARY
EXAMINATION REPORT

(PCT Rule 71.1)

Date of mailing
(day/month/year)

31.08.2004

Applicant's or agent's file reference
P/63604/GPTU51

IMPORTANT NOTIFICATION

International application No.
PCT/GB 03/00872

International filing date (day/month/year)
03.03.2003

Priority date (day/month/year)
05.03.2002

Applicant
MARCONI UK INTELLECTUAL PROPERTY LIMITED et al.

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.
4. **REMINDER**

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

The applicant's attention is drawn to Article 33(5), which provides that the criteria of novelty, inventive step and industrial applicability described in Article 33(2) to (4) merely serve the purposes of international preliminary examination and that "any Contracting State may apply additional or different criteria for the purposes of deciding whether, in that State, the claimed inventions is patentable or not" (see also Article 27(5)). Such additional criteria may relate, for example, to exemptions from patentability, requirements for enabling disclosure, clarity and support for the claims.

Name and mailing address of the international
preliminary examining authority:



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PATENT COOPERATION TREATY

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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

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|---|--|--|
| Applicant's or agent's file reference P/63604/GPTU51 | FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416) | |
| International application No. PCT/GB 03/00872 | International filing date (<i>day/month/year</i>) 03.03.2003 | Priority date (<i>day/month/year</i>) 05.03.2002 |
| International Patent Classification (IPC) or both national classification and IPC G10L15/26 | | |
| Applicant MARCONI UK INTELLECTUAL PROPERTY LIMITED et al. | | |

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 6 sheets, including this cover sheet.

☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 5 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the opinion
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

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| Date of submission of the demand 09.12.2003 | Date of completion of this report 31.08.2004 |
| Name and mailing address of the international preliminary examining authority: <div style="display: flex; align-items: center;"> <div> European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465 </div> </div> | Authorized Officer Lopes Margarido, C.D Telephone No. +49 89 2399-6087 |



**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/GB 03/00872

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-19, 21-33 as originally filed
20 filed with telefax on 28.06.2004

Claims, Numbers

1-45 as originally filed
46, 47 filed with telefax on 28.06.2004

Drawings, Sheets

1/3-3/3 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
☐ the language of publication of the international application (under Rule 48.3(b)).
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority in written form.
☐ furnished subsequently to this Authority in computer readable form.
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
☐ the claims, Nos.:
☐ the drawings, sheets:

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. **PCT/GB 03/00872**

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

| | | |
|-------------------------------|-------------|------|
| Novelty (N) | Yes: Claims | |
| | No: Claims | 1-47 |
| Inventive step (IS) | Yes: Claims | |
| | No: Claims | 1-47 |
| Industrial applicability (IA) | Yes: Claims | 1-47 |
| | No: Claims | |

2. Citations and explanations

see separate sheet

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Reference is made to the following documents:

D1: EP-A-1 093 097 (IBM) 18 April 2001 (2001-04-18)

D2: US-A-5 953 700 (PROCHILLO CARL ET AL) 14 September 1999 (1999-09-14)

1. The document D1 is regarded as being the closest prior art to the subject-matter of claim 1, and shows (the references in parentheses applying to this document) a method of using a telecommunications network (network: see paragraphs 39 and 40) cashless transaction service (see e.g. paragraphs 33 and 71) comprising the steps of:
 - a. a user accesses the service using a telecommunications network access instrument (communication device 102, laptop, PDA, pc, smartphone) which produces a signal (see paragraph 33);
 - b. the access instrument signal is forwarded to an interface device of the telecommunications network (see column 9, lines 15 to 18; figure 2, step 202);
 - c. the interface device extracts service identity and user identity data from the access instrument signal (see column 13, lines 46 to 50);
 - d. the interface device passes the data to a processing unit for the service of the telecommunications network;
 - e. the service processing unit processes the data;
 - f. the service processing unit instructs the interface device to forward the access instrumental signal to an input output device of the telecommunications network (see column 9, lines 48 to 58);
 - g. the service processing unit instructs the input output device to request details of the cashless transaction from the user (see column 9, lines 18 to 22);
 - h. the transaction details (transaction information) are sent to the input output device;
 - i. the input output device passes the transaction details to the service processing unit;
 - j. the service processing unit processes the details and decides whether or not the transaction can proceed (see column 14, lines 39 to 43; the decision is taken by confirming the transaction with the vendor's service provider/bank;

- bear in mind that the consumer's service provider and the vendor's service provider can be the same entity, see column 9, lines 48 to 58);
- k. the service processing unit causes output of a signal (confirmation number) conveying acceptance or rejection of the transaction to the user (see column 14, lines 39-47);
 - l. if the transaction can proceed, the service processing unit arranges for the transaction to be carried out (see column 15, lines 4 and 5).
2. Steps d), e), h) and i) are implicitly disclosed in D1, since in D1 an interface device, a service processing unit and an input output unit are integrated in the central server of the service provider of the user [104]. An interface device is the only possible way of connecting the communication link and the central server. A processing unit is an indispensable part of any server, and an input output unit is even referred to in D1 as an IVR module (see column 9, lines 48 to 58 and column 10, lines 12 to 17).
3. The subject-matter of claim 1 is therefore not new (Article 33(2) PCT).
4. Dependent claims 2-43 do not contain any features which, in combination with the features of any claim to which they refer to, meet the requirements of the PCT in respect of novelty and inventive step, see documents D1 and D2, in particular the corresponding passages cited in the search report.
5. The same reasoning used for claim 1 also applies, *mutatis mutandis*, to the systems of the independent claims 44 and 45. Therefore those claims are also not new.
6. As to claim 47, document D1 (see column 14, lines 6 to 10) refers explicitly to D2 in that the audio coupler of D2 could be used to perform the transactions and is capable of authenticating a user and establishing a communication with a central server to perform a remote financial transaction. Document D2 discloses (references in parentheses applying to this document) an audio coupler comprising:
- a. an audio generator arranged to generate audio signals that incorporate transaction details (see column 4, lines 8 to 18);
 - b. a receiver unit arranged to receive a telecommunications access instrument, the receiver also being arranged to input the transaction details into the access instrument (see column 2, line 36 to column 3, line 2);

- c. a memory arranged to store at least some of the transaction details, and input means arranged to receive at least some of the transaction details into the audio coupler (see column 2, lines 52 to 55; column 3, lines 53 to 66; column 7, lines 20 to 47).
- 7. Therefore D2 renders claim 47 not new (Article 33(2) PCT), see Guidelines C-IV 7.1.

means for instructing an interface device of the telecommunications network to forward the access instrument signal to an input output device of the telecommunications network,

means for instructing the input output device to request details of the cashless transaction,

means for processing the transaction details and deciding whether or not the transaction can proceed,

means for causing output of a signal conveying acceptance or rejection of the transaction, and

if the transaction can proceed, means for arranging for the transaction to be carried out.

The service may be provided as software which may be held on a service processing unit of the telecommunications network, such as an SCP.

According to a fourth aspect of the present invention there is provided an audio coupler for use with any of the first three aspects of the invention, comprising:

an audio generator ~~for arranged to generating~~ audio signals ~~that incorporate~~ transaction details,

a receiver unit ~~for arranged to receiving~~ a telecommunications access instrument ~~for inputting~~, the receiver unit also being arranged to input the transactions details into the access instrument,

a memory ~~for arranged to storage~~ at least some of the transaction details ~~or some of the transaction details therein~~, and

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input means ~~for entering~~ arranged to receive at least some of the transaction details of
~~some of the transaction details into the audio coupler.~~

processing the data, means for instructing an interface device of the telecommunications network to forward the access instrument signal to an input output device of the telecommunications network, means for instructing the input output device to request details of the cashless transaction, means for processing the transaction details and deciding whether or not the transaction can proceed, means for causing output of a signal conveying acceptance or rejection of the transaction, and if the transaction can proceed, means for arranging for the transaction to be carried out.

46. A service according to claim 49-45 which is provided as software held on a service processing unit of the telecommunications network.
47. An audio coupler comprising: an audio generator ~~for arranged to generating~~ generate audio signals that incorporate transaction details, a receiver unit ~~for arranged to receiving receive~~ a telecommunications access instrument, for the receiver unit also being arranged to inputting the transactions details into the access instrument, a memory ~~for arranged to storage~~ at least some of the transaction details or some of the transaction details therein, and input means ~~for entering~~ arranged to receive at least some of the transaction details or some of the transaction details into the audio coupler.

means for instructing an interface device of the telecommunications network to forward the access instrument signal to an input output device of the telecommunications network,

means for instructing the input output device to request details of the cashless
5 transaction,

means for processing the transaction details and deciding whether or not the transaction can proceed,

means for causing output of a signal conveying acceptance or rejection of the transaction, and

10 if the transaction can proceed, means for arranging for the transaction to be carried out.

The service may be provided as software which may be held on a service processing unit of the telecommunications network, such as an SCP.

15 According to a fourth aspect of the present invention there is provided an audio coupler for use with any of the first three aspects of the invention, comprising:

an audio generator arranged to generate audio signals that incorporate transaction details,

a receiver unit arranged to receive a telecommunications access instrument, the receiver
20 unit also being arranged to input the transactions details into the access instrument,

a memory arranged to store at least some of the transaction details therein, and input means arranged to receive at least some of the transaction details into the audio coupler.

processing the data, means for instructing an interface device of the telecommunications network to forward the access instrument signal to an input output device of the telecommunications network, means for instructing the input output device to request details of the cashless transaction, means for processing the transaction details and deciding whether or not the transaction can proceed, means for causing output of a signal conveying acceptance or rejection of the transaction, and if the transaction can proceed, means for arranging for the transaction to be carried out.

46. A service according to claim 45 which is provided as software held on a service processing unit of the telecommunications network.
47. An audio coupler comprising: an audio generator arranged to generate audio signals that incorporate transaction details, a receiver unit arranged to receive a telecommunications access instrument, the receiver unit also being arranged to input the transactions details into the access instrument, a memory arranged to store at least some of the transaction details therein, and input means arranged to receive at least some of the transaction details into the audio coupler.

INTERNATIONAL SEARCH REPORT

International Application No.
PCT/GB 03/00872

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G10L15/26 G07F19/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 G07F G10L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, COMPENDEX, INSPEC, PAJ, IBM-TDB, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|--|-------------------------|
| X Y | EP 1 093 097 A (IBM) 18 April 2001 (2001-04-18) paragraphs '0040!', '0045!', '0049!', '0051!; claims 1-3; tables 1-3 | 1-20, 42-46 21-41 |
| X Y | US 5 953 700 A (PROCHILO CARL ET AL) 14 September 1999 (1999-09-14) abstract; figure 1 | 47 21-41 |

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *Z* document member of the same patent family

Date of the actual completion of the international search

14 November 2003

Date of mailing of the international search report

26/11/2003

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INTERNATIONAL SEARCH REPORT

Information on patent family members

Information Publication No

PCT/GB 03/00872

| Patent document cited in search report | | Publication date | Patent family member(s) | Publication date |
|---|---|---------------------|----------------------------|---------------------|
| EP 1093097 | A | 18-04-2001 | EP 1093097 A2 | 18-04-2001 |
| US 5953700 | A | 14-09-1999 | CN 1229229 A | 22-09-1999 |
| | | | JP 11038992 A | 12-02-1999 |
| | | | TW 394894 B | 21-06-2000 |
| | | | US 6615171 B1 | 02-09-2003 |



INVESTOR IN PEOPLE

Application No: GB 0205104.3
Claims searched: 1 to 46, 48 to 51

Examiner: John Donaldson
Date of search: 11 October 2002

Patents Act 1977 Search Report under Section 17

Databases searched:

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:

UK Cl (Ed.T): G4H(HTG); G4A(AUXF); G4V(VAK)

Int Cl (Ed.7): G06F 17/00, 17/60; G07F 7/00

Other: Online:WPI, EPODOC, JAPIO

Documents considered to be relevant:

| Category | Identity of document and relevant passage | Relevant to claims |
|----------|--|--------------------|
| X | GB 2362012 A (IBM), see abstract | 1 to 19, 25 to 46 |
| X | EP 0913978 A2 (NCR), see abstract | 1 to 46 |
| X, E | WO 02/21464 A2 (NOKIA), see abstract | 1 to 19, 25 to 46 |
| X | WO 02/01516 A2 (INTEL), see abstract | 1 to 19, 25 to 46 |
| X | WO 97/45814 A1 (VAZVAN), see abstract | 1 to 19, 25 to 46 |
| X | WO 95/20195 A1 (DYNAMIC DATA), see abstract | 1 to 19, 25 to 46 |
| X | US 5157717 (HITCHCOCK), see abstract, Figure 4 | 1 to 46 |

X Document indicating lack of novelty or inventive step
Y Document indicating lack of inventive step if combined with one or more other documents of same category.
& Member of the same patent family

A Document indicating technological background and/or state of the art.
P Document published on or after the declared priority date but before the filing date of this invention.
E Patent document published on or after, but with priority date earlier than, the filing date of this application.

